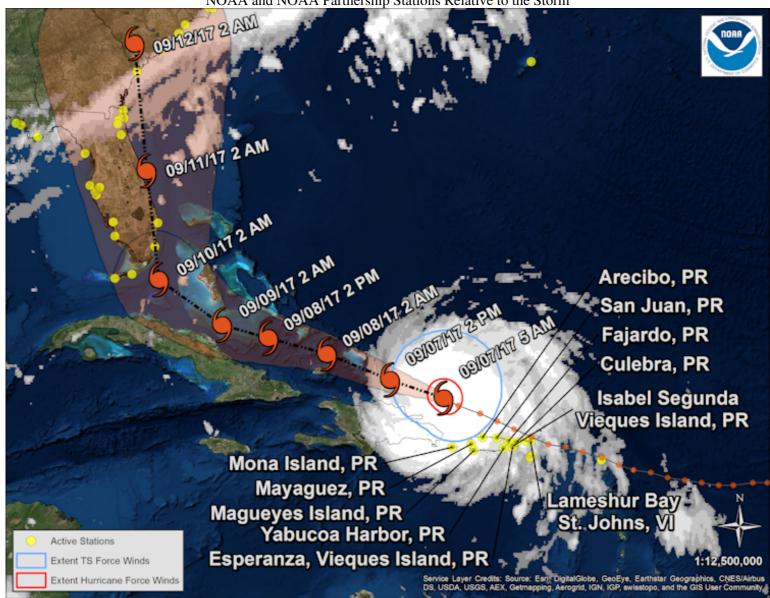


NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

^{**} Hurricane Warnings have been discontinued for U.S. Territories in the Carribean at this time. CO-OPS will continue to issue Storm QuickLooks as dangerous Hurricane Irma approaches the southeast United States in the next few days.

As of 09/07/2017 05:00 AST, water levels across Puerto Rico are measuring between 0.3 and 1.8 feet above normal tide levels as Irma continues to move away from the Island.

Winds continue to decrease with peak gusts around Puerto Rico in the past few hours only reaching around 30 knots at most locations. Barometric Pressure is beginning to increase at stations in Puerto Rico and the U.S. Virgin Islands.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High</u> <u>Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: CRD

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 33 NWS National Hurricane Center Miami FL 500 AM AST Thu Sep 07 2017

...EYE OF IRMA MOVING WEST-NORTHWESTWARD OFF THE NORTHERN COAST OF THE DOMINICAN REPUBLIC...

SUMMARY OF 500 AM AST...INFORMATION

LOCATION...20.0N 68.3W
ABOUT 95 MI...155 KM N OF PUNTA CANA DOMINICAN REPUBLIC
ABOUT 210 MI...335 KM ESE OF GRAND TURK ISLAND
MAXIMUM SUSTAINED WINDS...180 MPH
PRESENT MOVEMENT...WNW OR 290 DEGREES AT 17 MPH
MINIMUM CENTRAL PRESSURE...921 MB...27.20 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Government of the Bahamas has issued a Hurricane Warning for the Northwestern Bahamas.

All warnings are discontinued for Puerto Rico, Vieques, and Culebra.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- * Dominican Republic from Cabo Engano to the northern border with Haiti
- * Haiti from the northern border with the Dominican Republic to Le Mole St. Nicholas
- * Southeastern Bahamas and the Turks and Caicos Islands
- * Central Bahamas

* Northwestern Bahamas

A Hurricane Watch is in effect for...

* Cuba from Matanzas province eastward to Guantanamo province

A Tropical Storm Warning is in effect for...

- * Dominican Republic from south of Cabo Engano westward to the southern border with Haiti
- * Haiti from south of Le Mole St. Nicholas to Port-Au-Prince
- * Cuba provinces of Guantanamo, Holguin, and Las Tunas

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

Interests elsewhere in the Dominican Republic and Haiti, as well as Cuba and Florida should monitor the progress of Irma. A Hurricane Watch will likely be required later today for portions of southern Florida and the Florida Keys.

For storm information specific to your area, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 AM AST, the center of Hurricane Irma was located near latitude 20.0 North, longitude 68.3 West. Irma is moving toward the west-northwest near 17 mph, and this general motion is expected to continue with some decrease in forward speed for the next couple of days. On the forecast track, the center should pass north of the coast of Hispaniola later today, be near the Turks and Caicos and southeastern Bahamas by this evening, and then be near the Central Bahamas by Friday.

Maximum sustained winds are near 180 mph with higher gusts. Irma is a category 5 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful category 4 or 5 hurricane during the next couple of days.

Hurricane-force winds extend outward up to 50 miles from the center and tropical-storm-force winds extend outward up to 185 miles.

The estimated minimum central pressure is 921 mb.

HAZARDS AFFECTING LAND

STORM SURGE: The combination of a life-threatening storm surge and large breaking waves will raise water levels ABOVE NORMAL TIDE LEVELS by the following amounts within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

Turks and Caicos Islands...15 to 20 ft

Southeastern and central Bahamas...15 to 20 ft Northern coast of the Dominican Republic...3 to 5 ft Northern coast of Haiti and the Gulf of Gonave...1 to 3 ft Northern coast of Cuba in the warning area...5 to 10 ft

Water levels around Puerto Rico should subside today.

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

WIND: Hurricane conditions are expected to begin within the hurricane warning area in the Dominican Republic and Haiti today, with tropical storm conditions beginning in the next few hours. Hurricane conditions are expected to begin in the warning area in the southeastern Bahamas and the Turks and Caicos Islands later today with tropical storm conditions expected within the next several hours. These conditions will spread into the Central Bahamas by Thursday night or early Friday.

Hurricane and tropical storm conditions are possible within the watch area in Cuba by Friday. Tropical storm conditions are expected to begin within the warning area in Cuba Thursday night. Huricane conditions are expected in the northwestern Bahamas Friday night and Saturday.

RAINFALL: Irma is expected to produce the following rain accumulations through Saturday:

Northeast Puerto Rico and the British and U.S. Virgin Islands...An additional 2 to 4 inches.

Southeast Bahamas, Central Bahamas, and the Turks and Caicos...8 to

12 inches, isolated 20 inches.

Northern Dominican Republic and northern Haiti...4 to 10 inches,

isolated 15 inches.

Eastern and Central Cuba...4 to 10 inches, isolated 15 inches.

Southern Haiti...1 to 4 inches.

In all areas this rainfall may cause life threatening flash floods and mudslides.

SURF: Swells generated by Irma are affecting the northern Leeward Islands, Puerto Rico, the Virgin Islands, the southeastern Bahamas, the Turks and Caicos Islands, the northern coast of the Dominican Republic, and they should start affecting portions of the southeast coast of the United States later today and tonight. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next intermediate advisory at 800 AM AST.

Next complete advisory at 1100 AM AST.

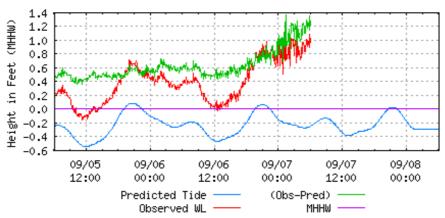
Forecaster Beven

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Mona Island - Water Level, Mona Island - Barometric, Mayaguez - Water Level, Mayaguez - Winds, Mayaguez - Barometric, Magueyes Island - Water Level, Magueyes Island - Winds, Magueyes Island - Barometric, Arecibo - Water Level, Arecibo - Winds, Arecibo - Barometric, San Juan, La Puntilla, San Juan Bay - Water Level, San Juan, La Puntilla, San Juan Bay - Water Level, San Juan Bay - Barometric, Yabucoa Harbor - Water Level, Yabucoa Harbor - Winds, Fajardo - Water Level, Fajardo - Winds, Esperanza, Vieques Island - Water Level, Esperanza, Vieques Island - Winds, Esperanza, Vieques Island - Water Level, Isabel Segunda, Vieques Island - Water Level, Culebra - Barometric, Lameshur Bay, St John - Water Level

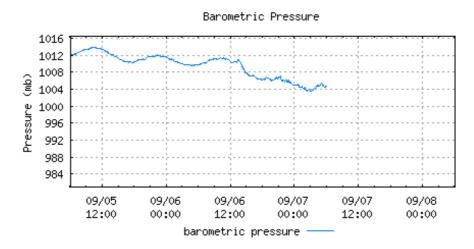
NOAA/NOS/CO-OPS 9759938 Mona Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:00 (AST). Data relative to MHHW Observed: 0.98 ft. Predicted: -0.24 ft. Residual: 1.22 ft. Historical Maximum Water Level: Dec 23 2010, 1.24 ft. Next High Tide: 09/07/2017 08:48 (AST), -0.13 ft.

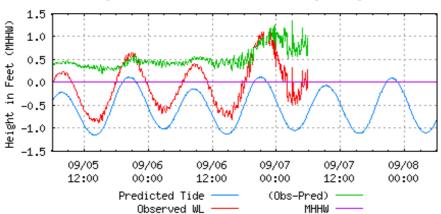
NOAA/NOS/CO-OPS 9759938 Mona Island, PR



Last Observed Sample: 09/07/2017 06:00 (AST)
Barometric Pressure: 1004.7 mb

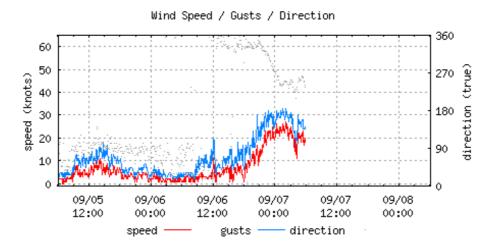
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:00 (AST). Data relative to MHHW Observed: -0.00 ft. Predicted: -0.66 ft. Residual: 0.66 ft. Historical Maximum Water Level: Oct 1 2015, 0.99 ft. Next High Tide: 09/07/2017 09:17 (AST), -0.06 ft.

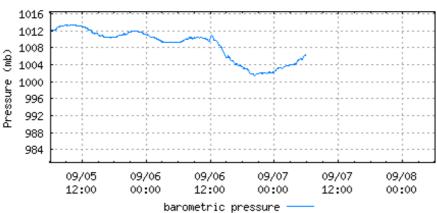
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



Last Observed Sample: 09/07/2017 06:00 (AST) Wind Speed: 17 knots Gusts: 23 knots Direction: 230° T

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Barometric Pressure

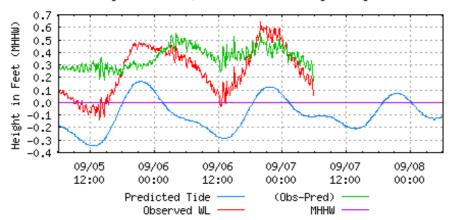


Last Observed Sample: 09/07/2017 06:00 (AST)

Barometric Pressure: 1006.5 mb

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:00 (AST). Data relative to MHHW Observed: 0.06 ft. Predicted: -0.12 ft. Residual: 0.18 ft. Historical Maximum Water Level: Sep 22 1998, 1.60 ft. Next High Tide: 09/07/2017 07:29 (AST), -0.11 ft.

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR

Wind Speed / Gusts / Direction 360 60 50 270 direction (true) speed (knots) 40 180 30 20 90 10 09/05 09/07 09/08 09/06 09/07 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 09/07/2017 06:00 (AST) Wind Speed: 19 knots Gusts: 23 knots Direction: 212° T

gusts

- direction

speed -

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR

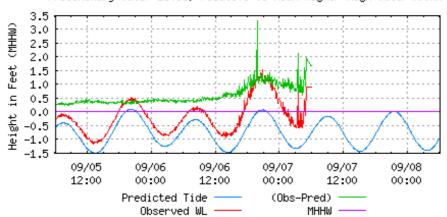
Barometric Pressure 1016 1012 1008 Pressure (mb) 1004 1000 996 992 988 984 09/08 09/05 09/06 09/07 09/06 09/07 12:00 00:00 12:00 00:00 12:00 00:00 barometric pressure

Last Observed Sample: 09/07/2017 06:00 (AST)

Barometric Pressure: 1006.8 mb

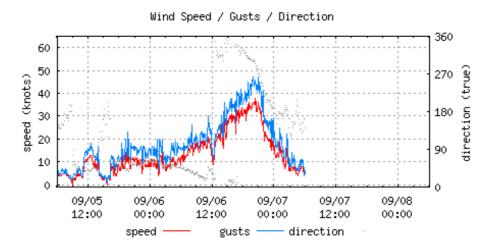
NOAA/NOS/CO-OPS 9757809 Arecibo, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: 0.90 ft. Predicted: -0.74 ft. Residual: 1.64 ft. Historical Maximum Water Level: Oct 8 2010, 0.90 ft. Next High Tide: 09/07/2017 09:05 (AST), -0.15 ft.

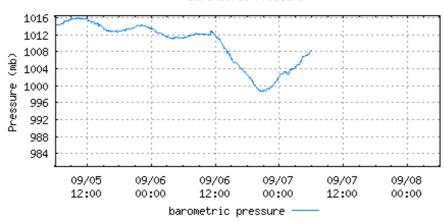
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/07/2017 06:06 (AST) Wind Speed: 5 knots Gusts: 7 knots Direction: 138° T

NOAA/NOS/CO-OPS 9757809 Arecibo, PR

Barometric Pressure

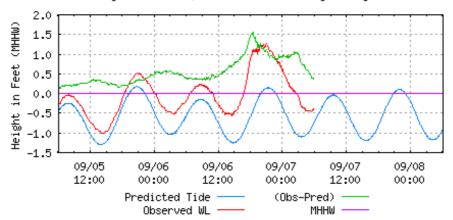


Last Observed Sample: 09/07/2017 06:06 (AST)

Barometric Pressure: 1008.7 mb

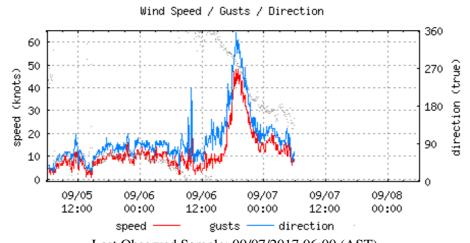
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



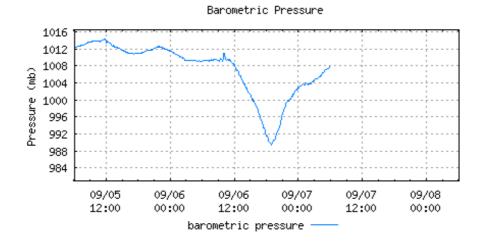
Last Observed Sample: 09/07/2017 06:00 (AST). Data relative to MHHW Observed: -0.37 ft. Predicted: -0.73 ft. Residual: 0.36 ft. Historical Maximum Water Level: Sep 18 1989, 2.77 ft. Next High Tide: 09/07/2017 09:33 (AST), -0.04 ft.

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/07/2017 06:00 (AST) Wind Speed: 10 knots Gusts: 11 knots Direction: 133° T

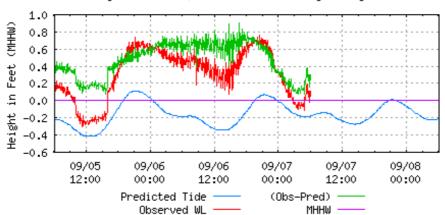
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/07/2017 06:00 (AST)
Barometric Pressure: 1008.3 mb

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR

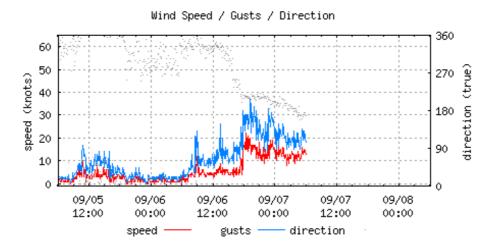
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: 0.16 ft. Predicted: -0.18 ft. Residual: 0.34 ft.

Historical Maximum Water Level: n/a Next High Tide: 09/07/2017 08:30 (AST), -0.14 ft.

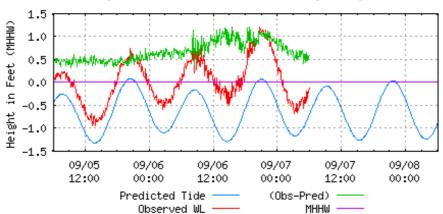
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



Last Observed Sample: 09/07/2017 06:06 (AST) Wind Speed: 14 knots Gusts: 19 knots Direction: 168° T

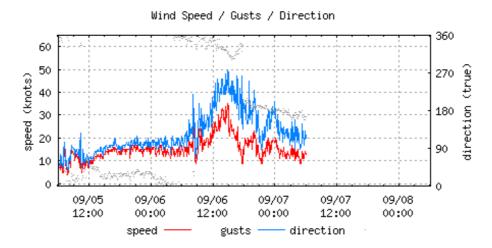
NOAA/NOS/CO-OPS 9753216 Fajardo, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: -0.09 ft. Predicted: -0.68 ft. Residual: 0.59 ft. Historical Maximum Water Level: Aug 30 2010, 0.84 ft. Next High Tide: 09/07/2017 09:15 (AST), -0.08 ft.

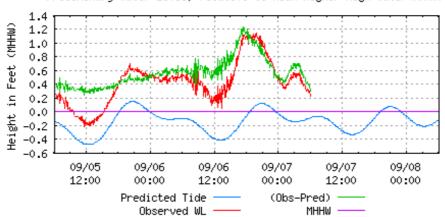
NOAA/NOS/CO-OPS 9753216 Fajardo, PR



Last Observed Sample: 09/07/2017 06:06 (AST) Wind Speed: 9 knots Gusts: 19 knots Direction: 168° T

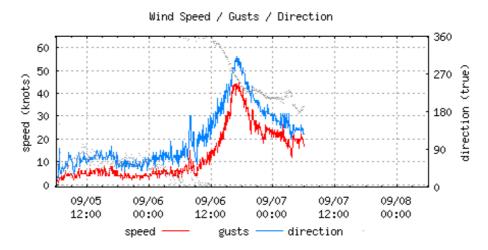
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: 0.26 ft. Predicted: -0.08 ft. Residual: 0.34 ft. Historical Maximum Water Level: Aug 22 2011, 0.99 ft. Next High Tide: 09/07/2017 07:27 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Viegues Island, PR



Last Observed Sample: 09/07/2017 06:06 (AST) Wind Speed: 18 knots Gusts: 21 knots Direction: 186° T

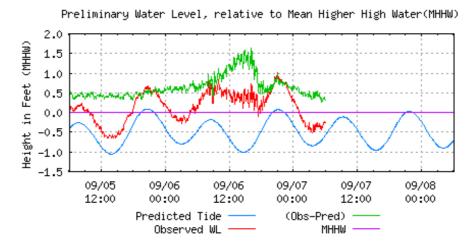
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

Barometric Pressure 1016 1012 1008 1004 1000 996 992 988 984 09/05 09/06 09/06 09/07 09/07 09/08 12:00 00:00 12:00 00:00 00:00 12:00 barometric pressure

Last Observed Sample: 09/07/2017 06:06 (AST)

Barometric Pressure: 1009.4 mb

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.56 ft. Residual: 0.41 ft. Historical Maximum Water Level: n/a

Next High Tide: 09/07/2017 09:18 (AST), -0.11 ft.

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Viegues Island, PR

Wind Speed / Gusts / Direction 360 60 50 270 direction (true speed (knots) 40 180 30 20 90 10 09/06 09/06 09/07 09/07 09/08 12:00 00:00 12:00 12:00 00:00 00:00 speed gusts -direction

Last Observed Sample: 09/07/2017 06:06 (AST) Wind Speed: 8 knots Gusts: 12 knots Direction: 175° T

NOAA/NOS/CO-OPS 9752235 Culebra, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW) 2.0 Height in Feet (MHHW) 1.5 1.0 0.5 0.0 -0.5 -1.0 09/05 09/06 09/06 09/07 09/07 09/08 12:00 12:00 00:00 00:00 00:00 12:00 Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 09/07/2017 06:00 (AST). Data relative to MHHW Observed: -0.04 ft. Predicted: -0.46 ft. Residual: 0.42 ft. Historical Maximum Water Level: Nov 6 2006, 0.84 ft. Next High Tide: 09/07/2017 09:13 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9752235 Culebra, PR

Barometric Pressure 1016 1012 1008 (glub 1004 1000 Pressure 996 992 988 984 09/06 09/05 09/06 09/07 09/07 09/08 12:00 00:00 12:00 00:00 00:00 12:00 barometric pressure

Last Observed Sample: 09/07/2017 06:00 (AST)
Barometric Pressure: 1009.5 mb

NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

Preliminary Water Level, relative to Mean Higher High Water(MHHW) 2.0 Height in Feet (MHHW) 1.5 1.0 0.5 0.0 -0.5 -1.0 09/05 09/06 09/06 09/07 09/07 09/08 12:00 00:00 00:00 12:00 00:00 12:00 Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 09/07/2017 06:06 (AST). Data relative to MHHW Observed: 0.40 ft. Predicted: -0.28 ft. Residual: 0.68 ft. Historical Maximum Water Level: Aug 30 2010, 0.89 ft. Next High Tide: 09/07/2017 09:24 (AST), -0.11 ft.

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9759938	Mona Island, PR	09/07/2017 06:00 (AST)	0.98 ft	-0.24 ft	1.22 ft	1.17 ft
9759394	Mayaguez, PR	09/07/2017 06:00 (AST)	-0.00 ft	-0.66 ft	0.66 ft	1.11 ft
9759110	Magueyes Island, PR	09/07/2017 06:00 (AST)	0.06 ft	-0.12 ft	0.18 ft	0.64 ft
9757809	Arecibo, PR	09/07/2017 06:06 (AST)	0.90 ft	-0.74 ft	1.64 ft	3.30 ft
9755371	San Juan, La Puntilla, San Juan Bay, PR	09/07/2017 06:00 (AST)	-0.37 ft	-0.73 ft	0.36 ft	1.27 ft
9754228	Yabucoa Harbor, PR	09/07/2017 06:06 (AST)	0.16 ft	-0.18 ft	0.34 ft	0.76 ft
9753216	Fajardo, PR	09/07/2017 06:06 (AST)	-0.09 ft	-0.68 ft	0.59 ft	1.21 ft
9752695	Esperanza, Vieques Island, PR	09/07/2017 06:06 (AST)	0.26 ft	-0.08 ft	0.34 ft	1.17 ft
9752619	Isabel Segunda, Vieques Island, PR	09/07/2017 06:06 (AST)	-0.15 ft	-0.56 ft	0.41 ft	1.02 ft
9752235	Culebra, PR	09/07/2017 06:00 (AST)	-0.04 ft	-0.46 ft	0.42 ft	1.00 ft
9751381	Lameshur Bay, St John, VI	09/07/2017 06:06 (AST)	0.40 ft	-0.28 ft	0.68 ft	1.15 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce